

Claims

1. An apparatus for making a hose comprising:

5 a weaving machine and a liner feeder for forming said hose by weaving a jacket about said liner as said liner is being fed into said weaving machine, said liner being provided with an adhesive layer on an outer surface, said adhesive layer being doped with a radiation absorbing element;

a feeder for receiving and for flattening said hose;

10 an oven located downstream from said feeder, including a bore through which said hose passes, said oven including means for applying radiation to said hose so that said radiation absorbing element heats following the application of radiation for bonding said liner to said jacket;

15 a winder, located downstream a predetermined distance away from said oven for pulling and winding said hose, said winder being further provided with pressure means for internally pressurizing a portion of said hose located between said winder and said feeder, whereby when said hose is in said oven, said pressure means force said liner against said jacket; and

a controller, for controlling said weaving machine, said liner feeder, said feeder, said oven and said winder.

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2. An apparatus according to claim 1, wherein said apparatus further includes an ultrasonic leak detector, located between said oven and said winder.

25 3. An apparatus according to claim 1, wherein said means for applying radiation comprise an at least one applicator plate module comprising an elongated frame having two opposite ends and a bore coincident with said bore of said oven; a plurality of longitudinally spaced apart plates lying in a plane perpendicular to an axis of said bore; said plates having applied thereto, in an alternating fashion, high and low voltages so that when said hose passes inside
30 said bore of said frame, said hose is subjected to alternating high and low voltages.

4. An apparatus according to claim 3, wherein said apparatus includes four applicator plates.

5. A method for curing a hose comprising:

- 5 (a) providing a woven jacket;
- (b) inserting a liner provided with an adhesive layer on an outer surface thereof into said jacket to form a hose, said adhesive layer being doped with a radiation absorbing element;
- 10 (c) passing said hose through a feeder, said feeder pinching said hose between at least two rollers;
- (d) pulling said hose with a winder, said winder including means for internally pressurizing said hose; and
- (e) at a location between said feeder and said winder, passing said hose into an oven, said oven including means for applying radiation to said.
15 hose so that said radiation absorbing element heats following the application of radiation for bonding said liner to said jacket.

6. A hose comprising a woven jacket, a liner and an adhesive layer located between said jacket and said liner, said adhesive layer being doped with a
20 radiation absorbing element.